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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,069

02/26/2004

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23548 7590 02/08/2006
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EXAMINER

CAO, PHAT X

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,069

Applicant(s)

ISHIMURA, EITARO

Examiner

Phat X. Cao

Art Unit

2814

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 December 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) 4-20 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/26/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. Applicant's election with traverse of claims 1-3 in the reply filed on 12/28/05 is acknowledged. The traversal is on the ground(s) that "the Examiner can efficiently examine all 20 claims at one time". This is not found persuasive because the species alleged in the restriction requirement mailed December 6, 2005 are different embodiments and distinct.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. Figures 9A-9B should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. Claim 1 is objected to because of the following informalities: in claim 1, line 1, "comprising;" should be changed to "comprising:". Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2814

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Rookes (US. 2002/0141142).

Rookes (Fig. 1) discloses a package for an optical semiconductor device (par. [0001]) comprising: a stem 104 having an under surface, an upper surface, a mount 126 to be mounted, with a laser diode optical semiconductor device 102 (par. [0016], lines 1-2), on the upper surface, at least one through hole 120 penetrating from the upper surface to the under surface, and a lead terminal 114 for signal supply (par. [0018], lines 1-2) penetrating one of the through holes and insulated by an insulator 120 from the stem 104 (par. [0016], lines 9-12), wherein the upper surface has an earth conductor or heat sink block 128 coupled to signal ground pin 110 (par. [0018], lines 8-10) and adjacent to the lead terminal 114 for signal supply projecting from the upper surface.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshino (US. 5,504,349) in view of Rookes (US. 2002/0141142).

Regarding claim 1, Yoshino (Fig. 4A) discloses a package for an optical

semiconductor device (column 1, lines 8-11), comprising: a stem 1 having an under surface, an upper surface, a mount 6 to be mounted, with an optical semiconductor laser device 7 (column 5, lines 49-51), on the upper surface, at least one through hole (not labeled, see column 6, lines 8-10) penetrating from the upper surface to the under surface, and a lead terminal 2 for signal supply (Fig. 4B) penetrating one of the through holes and insulated by an insulator from the stem 1 (column 6, lines 8-10), wherein the upper surface has a metal block conductor 14 adjacent to the lead terminal 2 for signal supply projecting from the upper surface.

Yoshino does not disclose that the metal block conductor 14 is an earth conductor.

However, Rookes (Fig. 1) teaches an optical semiconductor package having an optical semiconductor device 102 mounted on a metal block conductor 128. The metal block conductor 128 is coupled to signal ground pin 110 for functioning as an earth conductor (par. [0018], lines 8-10). Accordingly, it would have been obvious to form the metal block conductor 14 of Yoshino as the earth conductor by connecting the metal block conductor to the signal ground in order to ground the metal block conductor, as taught by Rookes (par. [0018], lines 8-10).

Regarding claim 2, Yoshino's Fig. 4A further discloses that the metal block conductor 14 has a circumference face (i.e., recess) enclosing at least part of the lead terminal 2 for signal supply projecting from the upper surface.

8. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bausman (US. 5,262,675) in view of Rookes (US. 2002/0141142).

Regarding claim 1, Bausman (Fig. 1) discloses a package for an optical semiconductor device (column 1, lines 10-12), comprising: a stem (not labeled) having an under surface, an upper surface, a mount 29 to be mounted, with an optical laser diode 18 (column 3, lines 51-53), on the upper surface, at least one through hole (not labeled) penetrating from the upper surface to the under surface, and a lead terminal 21 for signal supply (column 3, lines 51-53) penetrating one of the through holes and insulated by an insulator (not labeled) from the stem, wherein the upper surface has a conductor block 28 (column 3, lines 57-58) adjacent to the lead terminal 21 for signal supply projecting from the upper surface.

Bausman does not disclose that the conductor block 28 is an earth conductor.

However, Rookes (Fig. 1) teaches an optical semiconductor package having an optical semiconductor device 102 mounted on a metal block conductor 128. The metal block conductor 128 is coupled to signal ground pin 110 for functioning as an earth conductor (par. [0018], lines 8-10). Accordingly, it would have been obvious to form the metal block conductor 28 of Bausman as the earth conductor by connecting the metal block conductor to the signal ground in order to ground the metal block conductor, as taught by Rookes (par. [0018], lines 8-10).

Regarding claims 2-3, Bausman's Fig. 1 further discloses that the conductor block 28 surrounds at least 150 degrees (i.e., 180 degrees) around a center axis of the lead terminal 21 for signal supply projecting from the upper surface.

9. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshida et al (US. 6,777,792) in view of Rookes (US. 2002/0141142).

Regarding claim 1, Yoshida (Fig. 13) discloses a package for an optical semiconductor device (column 6, lines 3-6), comprising: a stem 11 having an under surface, an upper surface, a mount 74 to be mounted, with an optical laser device 80 (column 17, lines 43-44), on the upper surface, at least one through hole 16a penetrating from the upper surface to the under surface, and a lead terminal 16 for signal supply (column 17, lines 48-50) penetrating one of the through holes 16a and insulated by an insulator (column 8, lines 31-3) from the stem 11, wherein the upper surface has a block conductor 73 (column 17, lines 20-22) adjacent to the lead terminal 16 for signal supply projecting from the upper surface.

Yoshida does not disclose that the block conductor 73 is an earth conductor.

However, Rookes (Fig. 1) teaches an optical semiconductor package having an optical semiconductor device 102 mounted on a metal block conductor 128. The metal block conductor 128 is coupled to signal ground pin 110 for functioning as an earth conductor (par. [0018], lines 8-10). Accordingly, it would have been obvious to form the metal block conductor 73 of Yoshida as the earth conductor by connecting the metal block conductor to the signal ground in order to ground the metal block conductor, as taught by Rookes (par. [0018], lines 8-10).

Regarding claims 2-3, Yoshida's Fig. 13 further discloses that the block conductor 73 encloses at least part of the lead terminal 16a, and has a recessed face 73a surrounding at least 150 degrees (i.e., 180 degrees) around a center axis of the lead terminal 16a for signal supply projecting from the upper surface.

Art Unit: 2814

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phat X. Cao whose telephone number is 571-272-1703.

The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on 571-272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PC
February 3, 2006


PHAT X. CAO
PRIMARY EXAMINER